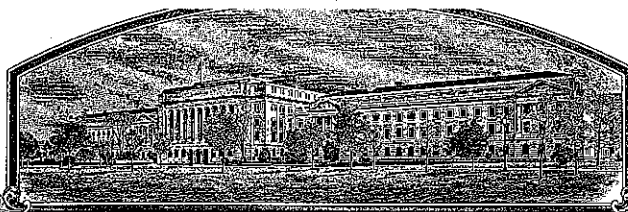


No.

200100260



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Syngenta Seeds, Inc. - Vegetables

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

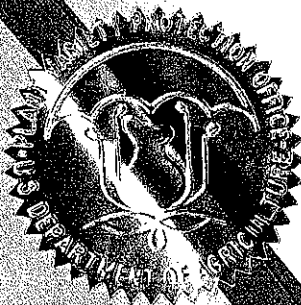
AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT, (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WATERMELON

'90-4194'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this fifth day of February, in the year two thousand two.



Attest.

Paul M. Jahn

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

W. G. ...

Secretary of Agriculture

REPRODUCE LOCALLY. Include form number and date on all reproductions

Form Approved - OMB No. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICEAPPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following state-ments are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER SYNGENTA SEEDS, INC. - VEGETABLES		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME 90-4194		3. VARIETY NAME 90-4194 31 Jan 2002	
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 600 N. ARMSTRONG PLACE BOISE, ID 83704		5. TELEPHONE (include area code) (208) 322-7272		FOR OFFICIAL USE ONLY PVPO NUMBER 200100260	
6. FAX (include area code) (208) 322-1436		7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) Corporation		8. IF INCORPORATED, GIVE STATE OF INCORPORATION Delaware	
9. DATE OF INCORPORATION 2-25-75		10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Charleen Orthel Syngenta Seeds - Vegetables P.O. Box 4188 Boise, ID 83711-4188		FILING AND EXAMINATION FEES: \$2705.00 DATE 08/20/01 CERTIFICATION FEE: \$320.00 DATE 10/22/01	
11. TELEPHONE (include area code) (208) 327-7246		12. FAX (include area code) (208) 322-1436		13. E-MAIL Charleen.orthel@syngenta.com	
14. CROP KIND (Common Name) Watermelon		15. GENUS AND SPECIES NAME OF CROP Citrullus lanatus		16. FAMILY NAME (Botanical) Cucurbitaceae	
17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(a) of the Plant Variety Protection Act <input type="checkbox"/> YES (If "yes", answer items 20 and 21 below) <input checked="" type="checkbox"/> NO (If "no," go to item 22)	
20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		21. IF "YES" TO ITEM 20, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED		22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)	
23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)		24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF OWNER Charleen Orthel		SIGNATURE OF OWNER			
NAME (Please print or type) Charleen Orthel		NAME (Please print or type)			
CAPACITY OR TITLE Customer Quality Mgmt. Coord		DATE 8/10/2001		CAPACITY OR TITLE	
DATE		DATE			

INSTRUCTIONS

200100260

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,450 (\$300 filing fee and \$2,150 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$300 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291

Homepage: <http://www.ams.usda.gov/science/pvp.htm>

ITEM

- 18a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) evidence of uniformity and stability; and (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
- (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
23. See Section 5.5 of the Act for instructions on claiming the benefit of an earlier filing date.

22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

N/A

23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

N/A

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your letter. Under the PRA of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotope, etc.) should contact the USDA Office of Communications at (202) 720-2791. To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call (202) 720-7327 (voice) or (202) 720-1127 (TDD). USDA is an equal opportunity employer.

STD-470 (6-98) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (03-96) which is obsolete.

Exhibit A
Origin and Breeding History of the Variety

Inbred 90-4194 was developed at the Syngenta Seed's Research Station in Woodland, California, as a result of conversion of diploid inbred HD (a proprietary inbred line of Syngenta Seeds, Inc.) to a tetraploid watermelon. The conversion from diploid (2X) to tetraploid (4X) was accomplished using an oryzalin protocol (a newly developed method) consisting of the following steps:

1. In November 1999, seed of HD were seeded in a 50-cell plastic seedling tray in the greenhouse. One drop of 35 micro-M oryzalin was added to the meristem tip between 2 cotyledons each of the newly emerged seedlings. Treatment of all the seedlings with oryzalin was finished about ten (10) days after sowing.
2. Seedlings were watered and fertilized periodically.
3. In late December of 1999, putative tetraploids were transplanted into two (2) gallon pots filled with Pro-Mix BX soil-less soil in the greenhouse.
4. During the course of plant development, diploid (not converted) plants and branches were removed based on leaf morphology and male flower characteristics.

Following is the chronological order of development of tetraploid line 90-4194:

<u>Generation</u>	<u>Season / Year</u>	<u>Description</u>
T0	Spring 2000	At the seedling transplant stage, 72 putative tetraploids were transplanted into 2-gallon pots in greenhouse. Non-converted plants and branches were identified based on leaf morphology and male flower characteristics, and were removed. Only the female flowers from true tetraploid plant/branches were self-pollinated. At full fruit maturity, fruit with large blossom end scar (2-3 times of its diploid version) were harvested and examined for fertility as suggested by number of seed per fruit. 4 individual selections 4XHD-1, -2, -3, and -4 and one bulk selection 4XHD-B were made to plant the T1 generation.
T1	Summer 2000	4XHD-1 and 4XHD-2 were planted in the greenhouse for further selection and seed increase. 4XHD-3 and 4XHD-4 were planted in the field for field observation and seed increase. 4XHD-B was planted in the crossing block in the field to make triploid hybrids. 4XHD-2 was not as good as 4XHD at the seedling stage and was discarded. 42 plants of 4XHD-1 were grown to maturity in the greenhouse. All the seeds of 4XHD-1 were bulk-harvested and labeled as 4XHD-1-B as no variation was observed in this line. No variation was observed within and between 4XHD-3 and 4XHD-4. Therefore seeds were also bulk-harvested and labeled as 4XHD-3/4.
	Fall 2000	Five triploid hybrids derived from 4XHD-B were evaluated at the Syngenta Seeds' Research Center in Naples, FL. Three hybrids were unique and promising triploid hybrids.
T2	Spring 2001	About 700 plants of 4XHD-1-B were planted in a plastic greenhouse for generation advance and seed increase. Hand pollination was conducted. No variation was observed. All the fruits are uniform and true to type. Seeds were bulk-harvested and named as 90-4194.
T3	Summer 2001	About 3500 plants were transplanted to a one-acre isolation plot for stock seed increase using bee pollination. 1200 plants of 90-4194 were transplanted into 2 cages for foundation seed increase by hand pollination. <u>No variation is observed from cage and field plantings. Breeding process is finished and seeds harvested serve as foundation and stock seed.</u>

Exhibit B
Novelty Statement for Inbred 90-4194

Watermelon inbred 90-4194 is unique based upon the following characteristics:

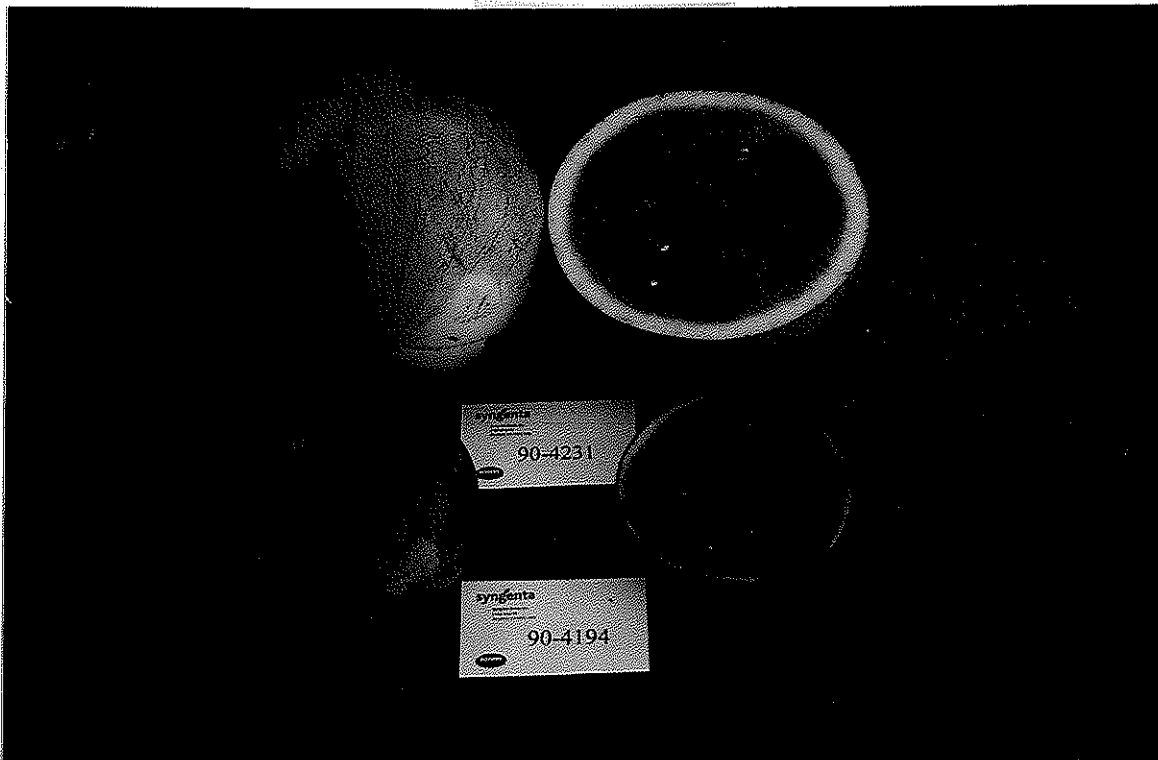
1. It is a tetraploid, with $N = 22$ chromosomes.
2. The fruit of 90-4194 are very small, about 1.6 kg.
3. The seeds of 90-4194 are very small, about 31 g per 1000 seeds.
4. The rind is very thin, only 4-7 mm.
5. 90-4194 has excellent fruit set ability under poor environmental conditions.
6. 90-4194 produces triploid hybrids with fruit size about 3 kg or smaller.

All the tetraploids used to produce commercial triploid hybrids have much bigger fruits, most are above 6 kg. This is the only tetraploid that produces triploid hybrids with personal size fruit, 2.5 – 3.5 kg.

No statistical data is deemed necessary as the fruit of 90-4194 is only 1/3 of the commercial tetraploid that has similar fruit shape and skin color.

Attachment

A photograph of the tetraploid watermelon inbred 90-4194 and tetraploid 90-4231 that is similar to 90-4194 in skin color and flesh color. 90-4231 is typical of the female tetraploid parents used in most of the triploid varieties currently sold.



FORM GR-470-19
(1-15-73)UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782EXHIBIT C
(Watermelon)OBJECTIVE DESCRIPTION OF VARIETY
WATERMELON (*CITRULLUS LANATUS*)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S)

Syngenta Seeds, Inc.

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)

600 N. Armstrong Pl.
Boise, Idaho 83704

FOR OFFICIAL USE ONLY

PVPO NUMBER

200100260

VARIETY NAME OR TEMPORARY
DESIGNATIONPlace the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g., or) when number is either 99 or less or 9 or less.

1. TYPE:

1 = OBLONG

2 = ROUND LARGE

3 = ROUND SMALL (icebox)

2. AREA OF BEST ADAPTATION:

1 = SOUTH

2 = NORTHEAST/NORTHCENTRAL

3 = SOUTHWEST

4 = MOST AREAS

3. EMERGENCE TO ANTHESIS:

NO. OF DAYS EARLIER THAN

1 = CHARLESTON GREY

NO. OF DAYS LATER THAN

2 = OTHER (Specify) 90-4231 (Commercial Grey 4X)

4. POLLINATION TO MATURITY:

NO. OF DAYS EARLIER THAN

1 = CHARLESTON GREY

NO. OF DAYS LATER THAN

2 = OTHER (Specify) 90-4231

5. PLOIDY:

1 = DIPLOID

2 = TETRAPLOID

3 = TRIPLOID

6. PLANT

Cotyledon:

1 = FLAT

2 = FOLDED

1 = MONOEICIOUS

2 = ANDROMONOECIOUS

Number of flowers per plant at first fruit set:

STAMINATE

PISTILLATE

PERFECT

NO. OF MAIN STEMS
AT CROWN

7. STEM:

1 = ROUND

2 = ANGULAR

MM. DIAMETER AT SECOND NODE

1 = GLABROUS

2 = SCABROUS

3 = PUBESCENT

4 = BRISTLED

CM. VINE LENGTH \div NO. OF INTERNODES (At last harvest)

8. LEAF:

1 = OVATE

2 = OBOVATE

3 = ROUND

1 = LONGER THAN WIDE

2 = LENGTH-WIDTH EQUAL

3 = WIDER THAN LONG

Dorsal Surface:

1 = SMOOTH

2 = PUBESCENT

Ventral Surface:

Color:

1 = LIGHT GREEN

2 = GRAY GREEN

3 = MEDIUM GREEN

4 = DARK GREEN

9. FLOWER (At first fruit set):

Staminate: CM. ACROSS

Perfect: CM. ACROSS

Color:

1 = LEMON YELLOW

2 = YELLOW 3 = ORANGE

FORM GR-470-19 (REVERSE)

10. MATURE FRUIT:

<input type="text" value="1"/> 1 = ROUND	<input type="text" value="2"/> 2 = OVAL	<input type="text" value="3"/> 3 = CYLINDRICAL	<input type="text" value="1"/> <input type="text" value="5"/> CM. LONG	<input type="text" value="1"/> <input type="text" value="5"/> CM. DIAMETER AT MIDSECTION
<input type="text" value="0"/> <input type="text" value="2"/> KG. AVERAGE WEIGHT	<input type="text" value="1"/> <input type="text" value="0"/> INDEX = LENGTH \div DIAMETER X 10			
<input type="text" value="1"/> 1 = SMOOTH	<input type="text" value="2"/> 2 = SLIGHTLY GROOVED	<input type="text" value="3"/> 3 = DEEPLY GROOVED		
<input type="text" value="3"/> Color: 1 = SOLID (One color)	<input type="text" value="2"/> 2 = STRIPE	<input type="text" value="3"/> 3 = MOTTLE/NET		
<input type="text" value="2"/> Primary Color: 1 = YELLOW GREEN (Desert King)	<input type="text" value="2"/> 2 = LIGHT GREEN (Charleston Grey)	<input type="text" value="3"/> 3 = MEDIUM GREEN (Sugar Baby)		
<input type="text" value="5"/> Secondary Color: 4 = DARK GREEN (Florida Giant)	<input type="text" value="5"/> 5 = OTHER (Specify) <u>pencil lines</u>			

11. RIND:

<input type="text" value="2"/> 1 = TENDER	<input type="text" value="2"/> 2 = BRITTLE	<input type="text" value="3"/> 3 = TOUGH	<input type="text" value="0"/> <input type="text" value="4"/> THICKNESS MM. BLOSSOM END
			<input type="text" value="0"/> <input type="text" value="7"/> THICKNESS MM. SIDES

12. FLESH:

<input type="text" value="1"/> 1 = CRISP	<input type="text" value="2"/> 2 = SOFT	<input type="text" value="2"/> 1 = COARSE-FIBROUS	<input type="text" value="2"/> 2 = FINE-LITTLE FIBER
<input type="text" value="4"/> Color: 1 = YELLOW	<input type="text" value="2"/> 2 = ORANGE	<input type="text" value="3"/> 3 = PINK	<input type="text" value="4"/> 4 = RED
<input type="text" value="5"/> 5 = DARK RED			
<input type="text" value="13"/> REFRACTOMETER % SOLUBLE SOLIDS OF JUICE (Center of fruit)	<input type="text" value="1"/> <input type="text" value="1"/> % CHECK VARIETY (Specify) <u>90-4231</u>		
<input type="text" value="0"/> % HOLLOW HEART	<input type="text" value="0"/> % PLACENTAL SEPARATION	<input type="text" value="0"/> % TRANSVERSE CRACK	

13. SEED:

<input type="text" value="0"/> <input type="text" value="7"/> MM. LONG	<input type="text" value="0"/> <input type="text" value="5"/> MM. WIDE	<input type="text" value="0"/> <input type="text" value="2"/> MM. THICK
<input type="text" value="1"/> <input type="text" value="4"/> INDEX \div LENGTH \div WIDTH X 10	<input type="text" value="3"/> <input type="text" value="1"/> GM. PER 1000 SEED	<input type="text" value="0"/> <input type="text" value="8"/> <input type="text" value="0"/> NO. SEED PER FRUIT
<input type="text" value="0"/> <input type="text" value="7"/> Color: 1 = WHITE	<input type="text" value="2"/> 2 = WHITE-TAN TIPPED	<input type="text" value="3"/> 3 = WHITE-PINK TIPPED
<input type="text" value="6"/> 6 = RED	<input type="text" value="7"/> 7 = DARK BROWN	<input type="text" value="8"/> 8 = DARK BROWN MOTTLED
<input type="text" value="9"/> 9 = BLACK	<input type="text" value="10"/> 10 = MOTTLED BLACK	

14. DISEASE RESISTANCE: (0 = Untested, 1 = Susceptible, 2 = Resistant)

<input type="text" value="0"/> ANTHRACNOSE (Race _____)	<input type="text" value="0"/> DOWNY MILDEW	<input type="text" value="0"/> FUSARIUM WILT	<input type="text" value="0"/> GUMMY STEM BLIGHT
<input type="text" value="0"/> SQUASH MOSAIC	<input type="text" value="0"/> WATERMELON MOSAIC	<input type="text" value="0"/> POWDERY MILDEW	<input type="text" value="0"/> CUCUMBER MOSAIC
<input type="text" value="0"/> OTHER (Specify) _____			

15. OTHER RESISTANCE: (0 = Untested, 1 = Susceptible, 2 = Resistant)

<input type="text" value="2"/> SUNBURN	<input type="text" value="0"/> ROOT KNOT	<input type="text" value="0"/> OTHER (Specify) _____
--	--	--

16. NAME A VARIETY THAT MOST CLOSELY RESEMBLES THAT SUBMITTED: 90-4231 Commercial 4X

Days maturity	35 days from flower	Fruit shape	Round
Plant vigor	Average	Rind color	Light green
Fruit Size	6-7 kg	Flesh quality	Good

REFERENCES:

1. Frey, K. J. 1966. Plant Breeding - Symposium. 1 ed. Iowa State University Press.
2. Ware, G. W. and McCollum, J. P. 1968. Producing Vegetable Crops. Interstate Printers & Publishers, Inc. Danville, Illinois.
3. Whitaker, T. W. and Davis, G. N. 1962. Cucurbits. Interscience Publishers, Inc. New York.
4. Nickerson's or any recognized color fan should be used to determine the plant colors of the described variety.

5. *Royal Horticultural Society Color Charts

Exhibit D
Additional Description for Tetraploid Watermelon 90-4194

Tetraploid watermelon inbred 90-4194 is a unique tetraploid line for creating triploid seedless watermelon hybrids with excellent fruit quality, small fruit size, early maturity and excellent fruit set ability. It's novelty is based on the small fruit size (only $\frac{1}{4}$ - $\frac{1}{3}$ of commonly used commercial tetraploid), excellent fruit set ability (when 24 watermelon genotypes were grown in plastic greenhouse without supplement light in the spring season of 2001, 90-4194 is the only variety which produced fruit), early maturity (at least a week earlier than most tetraploid watermelons) and small seed size (a half to one third of common tetraploid seed).

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICEEXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) SYNGENTA SEED, INC. - VEGETABLES	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER 90-4194	3. VARIETY NAME
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) 600 N. ARMSTRONG PLACE BOISE, ID 83704	5. TELEPHONE (include area code) (208) 322-7272	6. FAX (include area code) (208) 322-1436
7. PVPO NUMBER 200/00260		

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain. ☒ YES ☐ NO9. Is the applicant (individual or company) a U.S. national or U.S. based company?
If no, give name of country ☒ YES ☐ NO10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)?

☐ YES ☐ NO If no, give name of country

b. If original rights to variety were owned by a company(ies), is(are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (if needed, use reverse for extra space):

EXHIBIT E.11

STATEMENT OF THE BASIS OF APPLICATION (See Attached)

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call 1-800-245-6340 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.

STD-470-E (07-97) (Destroy previous editions).

Electronic version designed using WordPerfect InForms by USDA-AMS-IMB.

EXHIBIT E.11

STATEMENT OF THE BASIS OF APPLICATION OWNERSHIP

The variety, 90-4194, for which Plant Variety Protection is hereby being sought, was developed by Dr. Xingping Zhang, an employee of Syngenta Seeds, Inc. – Vegetables. By agreement between the employees and Syngenta Seeds, Inc.- Vegetables, all rights to any invention, discovery or development made by the employee while employed by Syngenta Seeds, Inc. – Vegetables are assigned to Syngenta Seed, Inc. – Vegetables with no rights of any kind retained by the employees.